DOCUMENT RESUME

ED 396 993 SO 026 712

| | |
|---|---|
| TITLE | Results from the NAEP 1994 Geography Assessment--At a Glance. |
| INSTITUTION | National Center for Education Statistics (ED), Washington, DC. |
| REPORT NO | NCES-96-876 |
| PUB DATE | 96 |
| NOTE | 6p. |
| PUB TYPE | Information Analyses (070) |
| EDRS PRICE | MF01/PC01 Plus Postage. |
| DESCRIPTORS | Achievement; *Educational Assessment; Elementary Secondary Education; Evaluation; *Geography; Grade 4; Grade 8; Grade 12; Measurement; *National Surveys; Public Policy; Standards; *Student Evaluation; Testing; Tests |
| IDENTIFIERS | *National Assessment of Educational Progress |

ABSTRACT

This brief report highlights the findings of the National Assessment of Educational Progress (NAEP) assessment of geography conducted with students in grades 4, 8, and 12 in 1994. Major findings include: (1) the average score of students in grade 4 was 206, 260 in grade 8, and 285 in grade 12 on a scale from 0 to 500 with achievement levels of Basic, Proficient, and Advanced; (2) at all grade levels, approximately 70 percent of students were able to reach the Basic level; and (3) the Proficient level was reached by 22 percent of fourth graders, 28 percent of eighth graders, and 27 percent of twelfth graders. On individual assessment tasks, students demonstrated a range of competencies, including using maps, illustrations, and interpretation of data. Major findings for student subgroups are analyzed, and contextual factors related to geography performance are discussed. (EH)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED 396 993

# Results from the NAEP 1994 Geography Assessment--At a Glance

**National Center of Education Statistics**

**U.S. Department of Education**

**BEST COPY AVAILABLE**

SO 026 712

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

## Results From The

# NAEP 1994 Geography Assessment

## — At A Glance

Governments, economies, and ecosystems do not exist in isolation. People and regions are connected by trade agreements, global markets, communications networks, political alliances, and international organizations. Increasingly, nations are sharing concerns about the global environment. United States foreign and economic policies must account for events across the globe: Competition for jobs in Peoria is as likely to come from Kuala Lumpur as from Fresno. Events from around the world, such as the unification of Germany, affect us in profound ways. If our children are to be productive and responsible citizens of both the United States and the global community, they must know and understand the connections among the world's regions and peoples and the circumstances that lead these connections to evolve and change. In other words, they must have a working knowledge of the subject of geography.

To assess the current level of geography knowledge, the 1994 National Assessment of Educational Progress (NAEP) assessed geography at grades 4, 8, and 12. The assessment probed students' ability to recall, understand, analyze, and interpret the broad field of geography. As the nation's foremost ongoing educational survey, NAEP results track trends in students' performance and allow concerned readers to evaluate whether our nation's children are developing the geography skills and knowledge essential for effective participation in the economy and the polity. The highlights of this extensive, innovative assessment are presented in the following pages. (More detailed results can be found in other NAEP reports about the geography assessment. Information on how to obtain these reports is found on the last page of this brochure.)

The structure and content of the geography assessment were guided by a comprehensive framework, or blueprint, developed under the direction of the National Assessment Governing Board. Three geography content areas served as the core organizing structure of the assessment. The content areas, listed on the following page, were intended to ensure that all major branches of geography study were covered and that emphasis on the various areas was balanced.



BEST COPY AVAILABLE

Space and Place: Knowledge of geography as it relates to particular places on Earth, to spatial patterns on Earth's surface, and to physical and human processes that shape such spacial patterns

Environment and Society: Knowledge of geography as it relates to the interaction between environment and society

Spatial Dynamics and Connections: Knowledge of geography as it relates to spatial connections among people, places, and regions

Student performance is summarized on the NAEP geography scale, which ranges from 0 to 500. In addition, results for each grade are reported according to three achievement levels: *Basic*, *Proficient*, and *Advanced*. These achievement levels are based on judgments about what students should know and be able to do in geography. The *Basic* level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade. The *Proficient* level represents solid academic performance and demonstrated competence over challenging subject matter. The *Advanced* level signifies superior performance.

It should be noted that the setting of achievement levels on NAEP is relatively new and in transition. However, those responsible for NAEP also believe that the achievement levels are useful and valuable in reporting on the educational achievement of the nation's students.

The average score of students in grade 4 was 206. The bottom 10 percent of the population scored at or below 146, and the top 10 percent scored at or above 257.

At grade 8, the average score was 260. The bottom 10 percent of the population scored at or below 213, and the top 10 percent scored at or above 302.

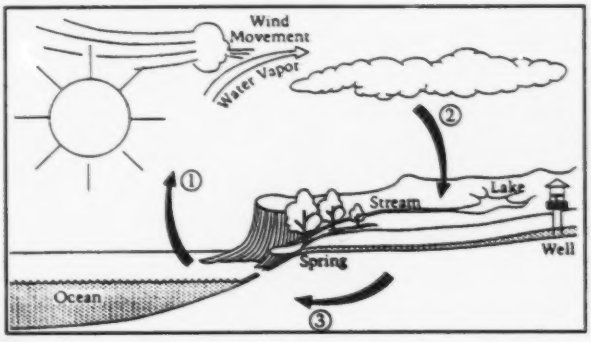
The average score of students in grade 12 was 285. The bottom 10 percent scored at or below 244, and the top 10 percent scored at or above 321.

At grades 4, 8, and 12, approximately 70 percent of students were able to reach the *Basic* level.

The *Proficient* level was reached by 22 percent of fourth graders, 28 percent of eighth graders, and 27 percent of twelfth graders.

On individual assessment tasks, students demonstrated a range of competencies. For example:

At grade 4, 79 percent of the students could identify the water cycle from an illustration (see below); 70 percent could draw a generally accurate map of an island from a written description; 59 percent could use a map to explain the concentration of highways in the eastern United States; and 13 percent could describe two important effects of an oil spill in the ocean.




**What would be the best title for this picture?**

A The Tides

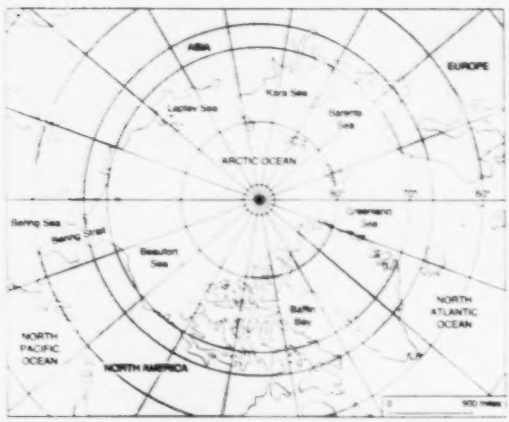
B The Water Cycle

C The Seasons

D Ocean Currents

Answer: B

At grade 8, 90 percent of students knew where to locate information in an atlas; 70 percent could understand why immigrants congregate in New York City; 48 percent could identify latitude on a polar map projection (see below) ; and 36 percent could identify and explain two reasons why a particular route for a railroad would prove cheaper to construct than an alternate route.




**Latitude on this map is represented by**

A circles

B shaded areas

C straight lines

D convergent lines

Answer: A

At grade 12, 91 percent of students could use a map to identify an area of earthquake activity; 66 percent could construct a precipitation pie chart from tabled data; 55 percent could give at least two geographically accurate reasons that a shopping center should be placed at a given location; and 10 percent could identify Canada as the United States' largest trading partner (see below).

**Which of the following countries has the largest volume and value of trade with the United States?**

A Japan

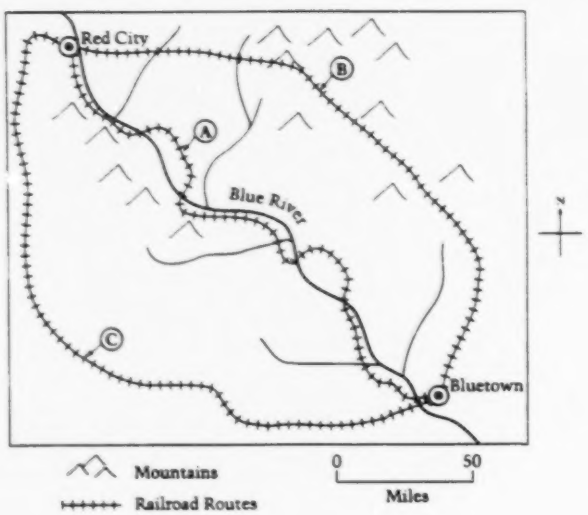
B Great Britain

C Canada

D Germany

Answer: C

The assessment included both multiple-choice questions, such as those shown previously, and constructed-response questions. Constructed-response questions require students to write responses of as little as a few sentences, or as much as a few paragraphs. For example, the question shown below was given to students at grade 8. Some credit was awarded for student responses that were only partially correct. Thirty-six percent of eighth graders received full credit for their responses.




**Look at the map above, which shows three possible routes for a railroad line that will be built to connect Red City with Bluetown.**

**Which route would be the least expensive to construct?**

_____

**Give two reasons why the route you chose would be the least expensive.**

**1** _____

**2** _____

## Major Findings for Student Subgroups

- As has been the case in other NAEP assessments, there were statistically significant differences in the performance of major subgroups of the population. For example, at all grades White and Asian students had higher average scores than did their Black and Hispanic counterparts.
- Consistent with findings in other NAEP assessments, there was a strong relationship between differing levels of parental education and performance on the NAEP geography assessment. As a general rule, the more education students reported that their parents had received, the better the students performed on the assessment.
- Male students at grades 4, 8, and 12 performed at a higher level than females.
- At all three grades, students attending nonpublic schools performed at a higher level than did students attending public schools.

## Contextual Factors Related to Geography Performance

A diverse range of home and school factors influence the ways and extent to which students learn geography. Students who participated in the NAEP assessment were asked to complete questionnaires about their home and school experiences related to geography learning. Also, teachers completed questionnaires about their students' instructional experiences. The results of these surveys help provide a context for interpreting the assessment scores and provide policymakers with information about variables that are positively and negatively related to geography achievement.

- Over 40 percent of the students at grades 4 and 8, and 25 percent of the students at grade 12, reported watching four or more hours of television each day. In most cases, the more television students reported watching the worse they performed on the geography assessment.
- Fifty-six percent of the fourth graders, 39 percent of the eighth graders, and 31 percent of the twelfth graders reported discussing their studies at home daily. By contrast, 17, 21, and 24 percent of the students at each grade, respectively, reported never or hardly ever discussing their studies. Students who reported not discussing their studies at home performed at a lower level than did students who discussed their studies on a regular basis.
- Geography instruction is limited for grade 4 students. More than 60 percent of students had teachers who reported spending less than 45 minutes per week on geography instruction. Most eighth-grade students reported having taken at least one geography class since the sixth grade.
- Twenty-six percent of fourth graders, 19 percent of eighth graders, and 14 percent of twelfth graders indicated that geography was their favorite subject. At all grades, students who indicated that geography was their favorite subject performed at a higher level than did those who indicated that they liked other subjects better.

## For More Information . . .

More complete results of the NAEP 1994 geography assessment are available in two National Center of Education Statistics publications:

*NAEP 1994 Geography: A First Look*

*NAEP 1994 Geography Report Card*

The *First Look* highlights the overall and demographic results, while the *Report Card* is a more extensive treatment of the findings and includes discussions of contextual factors that are related to geography performance.

For ordering information on these reports, write:

National Library of Education
Office of Educational Research and Improvement
U.S. Department of Education
555 New Jersey Avenue, NW
Washington, D.C. 20208-5641

or call 1-800-424-1616 (in Washington, DC metropolitan area call 202-219-1651).

NCES 96–876